

SUBJECT: Guidance on Safe Execution of Exercises for Physical Training

1. This message supersedes all previous messages, articles and references concerning lists of unsafe exercises deleted from physical training. This message also provides up-to-date guidance that will enhance physical fitness with minimum risk of injury.
2. Physically fit soldiers can perform almost any type of exercise with little risk of injury. However, not all soldiers are fit and some may be prone to injuries. Therefore, not all exercises are recommended for all soldiers.
3. Exercises listed in FM 21-20 (SEP 92) are safe for healthy and uninjured soldiers. Some exercises that cause excessive bending of the knee while bearing weight or ballistic bouncing, twisting and bending may be too advanced for some soldiers to perform without risk of injury. The mule kick and ski jump should be performed with gradual progression in duration and intensity. Unfit soldiers may not be able to perform a large number of repetitions of these exercises without a risk of injury. Therefore, care must be taken when incorporating these exercises into your unit physical fitness program.
4. Exercises referenced in past editions of FM 21-20 are sometimes appropriate for training if they are taught to soldiers with the adequate flexibility and strength needed to perform the techniques properly. Here are some examples: 8-count push-up, squat thrust, squat stretch, mountain climber and squat bender. These exercises require knee joint and leg muscle strength to accommodate a range of motion lower than 90 degrees. The body twist, v-up and touch toes, trunk twister, leg circular and legs over are too advanced for the strength and flexibility of most soldiers and should be avoided in mass training.
5. Adequate strength, flexibility and mastery of technique are important in performing any exercise. Special attention to detail and conditioning are extremely important in the correct and safe execution of obstacles such as the horizontal ladder and log drills such as the straddle jump and overhead toss.
6. Stretching exercises should be performed without pain or unnatural stress at a joint. Slow, controlled movements to stretch positions and changes in position are important to injury prevention. Partner-assisted stretching techniques must be executed properly to achieve the maximum benefits with minimal risk of injury.
7. Proper execution and common sense are the main ingredients for conducting safe physical training. Strict adherence to the seven principals of exercise (progression, regularity, overload, variety, recovery, balance and specificity) will make your program successful and minimize the risk of overuse injuries. The key exercise principles for avoiding injury are progression and recovery. Programs that try to do too much too soon invite problems. After "hard" training days, the following training day should be conducted at a reduced intensity. This will minimize stress and permit recovery. Another technique is to train alternate muscle groups and/or components of fitness on consecutive days.
8. Using the latter, vigorous physical training could be performed on a daily basis. The recommendation for unit physical fitness is that it should be conducted a minimum of 5 days per week.
9. Commanders should be aware that there are a variety of methods they may use to reach their PT goals. The unit Master Fitness Trainer is educated to answer questions about physical fitness training techniques and explain safe, effective ways to attain physical fitness goals.
10. POC at the U.S. Army Physical Fitness School is Mr. Frank Palkoska, DSN 835-6330.